## LRX 2281 ELECTRONIC PANEL



Single-phase electronic control unit for the automation of swing gates with incorporated radio receiver.

- Mod. LG 2281 : Without radio receiver

- Mod. LRS 2281 : 433.92 Mhz

- Mod. LRS 2281 SET : 433.92 Mhz "narrow band" : 868.3 Mhz "narrow band"

### **IMPORTANT FOR THE USER**

- The device can be used by children over 8 years of age and persons with reduced physical or psychological abilities or with little knowledge and experience only if supervised or educated in its operation and safe use, in order to also understand the dangers involved in its use.
- these instructions are also available at the website www.seav.com
- Do not allow children to play with the device and keep the radio controls away from their reach.
- Frequently examine the system to detect any signs of damage. Do not use the device if it is in need of repair work.
- -Always remember to disconnect the power supply before carrying out any cleaning or maintenance.
- Cleaning and maintenance must not be carried out by unsupervised children

- **ATTENTION:** keep this instruction manual safe and observe the important safety requirements contained herein. Failure to comply with the requirements may cause damage and serious accidents.

### **IMPORTANT FOR the INSTALLER**

- Before automating the gate, check that it is in good conditions, in compliance with the Machinery Directive and with EN 12604.
- Check that the location where the installation is located enables compliance with operating temperature limits specified for the device.
- The safety of the final installation and compliance with all prescribed Standards (EN 12453 - EN 12445) is the responsibility of the person who assembles the various parts to construct a total closing.
- Once installation is finished, it is recommended that all necessary checks be performed (appropriate programming of the control panel and correct installation of safety devices) to ensure that compliant installation has been performed.
- The control unit does not have any type of isolating device for the 230 Vac line. It is therefore the responsibility of the installer to set up an isolating device inside the system. It is necessary to install an omnipolar switch, surge category III. It must be positioned to provide protection from accidental closing, pursuant to point 5.2.9 of EN 12453.
- For the power supply cables, use flexible cables in an insulating sheath in harmonised polychloroprene (H05RN-F) with a minimum conductor section of 1mm2
- The various electrical components external to the control unit must be cabled in accordance with standard EN 60204-1 as amended, and as set forth in point 5.2.7 of EN 12453. Power cables may have a maximum

diameter of 14 mm. The fixing of power and connection cables must be secured through the use of "optional" cable glands supplied. Pay careful attention when fastening the cables so that they are anchored in a stable manner.

Furthermore, care is required when drilling holes in the outside casing where connecting and power supply cables will pass, and when assembling the cable glands, so that everything is installed so as to maintain the panel's IP protection characteristics.

- The assembly of a push button panel for manual control must be completed positioning the push button panel in such a way that the user is not placed in a dangerous position.
- The rear part of the casing is equipped with fittings for wall mounting (it is possible to drill holes for installation with plugs, or there are already holes available for installation with screws). Plan and implement all necessary measures to achieve an installation that does not alter the IP protection.
- The gear motor used to move the gate must comply with the requirements of point 5.2.7 of EN 12453.
- The D.S. Power Supply output must be dedicated to the power supply of the photocells only. It cannot be used for other applications.
- With every operation cycle, the control unit performs the photocell operating test, ensuring protection against the rupture of Category 2 crush-proof devices, in accordance with point 5.1.1.6. of EN 12453. Accordingly, if the safety devices are not connected and/or are not working, the control unit is not enabled for operation.
- The safety function ensured by the control unit is active only during closing, therefore, protection on opening must be ensured in the installation phase with measures (guards or safety distances) independent of the control circuit.
- For proper functioning of the radio receiver, if using one or more control units, the installation at a minimum distance of at least 3 metres one from the other is recommended.

The electronic control unit:

LG 2281 - LRS 2281 - LRS 2281 SET - LRH 2281

they comply with the specifications of the Directives R&TTE 99/5/EC, EMC 2004/108/EC, LVD 2006/95/EC.



## **TECHNICAL DATA:**

- Electric lock output

- Power supply : 230 Vac 50-60Hz 1600W max.

- Flashing light output : 230 Vac 500 W max.

- Motor outputs : 230 Vac 50/60 Hz. 500 W max.

: 12 Vdc 15 W max.

Power supply to photocells
 Safety devices and controls in BT: 24 Vdc
 Working temperature
 Radio receiver
 24 Vac 3 W max.
 10 ÷ 55 °C
 see model

- Op. transmitters : 12-18 Bit or Rolling Code -TX max codes in memory : 150 (CODE or PED CODE)

- Board dimensions : 140x125x45 mm. - Container dimensions : 190x140x70 mm.

- Protection rating : IP 56

## **TERMINAL BOARD CONNECTIONS:**

### CN1:

1 : 230 Vac line input (Phase).2 : 230 Vac line input (Neutral)

3 : 230 Vac Flashing light Output (Neutral).4 : 230 Vac Flashing light Output (Phase).

5 : Motor 1 Output opening.
6 : Motor 1 Output common.
7 : Motor 1 Output closing.
8 : Motor 2 Output opening.
9 : Motor 2 Output common.

10 : Motor 2 Output closing.

### CN2:

1 : Photocell Control and Power Supply ( 24Vac ).

2 : Photocell Control and power supply (GND).

3 : Electric lock output 12 Vdc 15 W (+12V).

4 : Electric lock output 12 Vdc 15 W (GND).

5 : Open-close push button control PUL input (NA).

6 : Common GND input.

7 : Pedestrian push button control PUL PED input (NA).

8 : Safety device DS1 input (NC).

9 : Common GND input.

10 : Safety device DS2 input (NC).

11 : Antenna earth input.12 : Antenna hot pole input.

## **OPERATING CHARACTERISTICS:**

# **Automatic Operation:**

By using both the radio control ( CODE LED on ) and the low voltage push button panel ( PUL ) to activate the gate, the following functioning is obtained:

the first impulse commands the opening mechanism until motor time expires. The second impulse commands gate closing. If an impulse is sent before the motor time has expired, the control unit will **reverse** motion direction both for opening and closing.

## Step-by-step operation:

By using both the radio control ( CODE LED on ) and the low voltage push button panel ( PUL ) to activate the gate, the following functioning is obtained:

the first impulse commands the opening mechanism until the motor time expires. The second impulse commands gate closing. If an impulse is sent before the

motor time has expired, the control unit will **stop** the motion during opening and closing phase. An additional control restarts motion in the opposite direction.

## Automatic closing:

The control unit closes the gate automatically without sending additional commands.

Selecting this operating mode is described under the instructions for setting the pause time.

#### **Pedestrian Passage:**

The control unit allows only Motor 1 to be activated using either the radio control (CODE PED. LED on) or the push button panel (PED), for the programmed time. (T.MOT. PED. LED).

## Safety device 1:

The control unit allows Photocells to be powered and connected in accordance with directive EN 12453.

If the device trips during opening, it is ignored. If it trips during closing, gate motion is reversed.

The control unit compulsorily requires the use of photocells, connected to dedicated inputs, otherwise the unit is not enabled for operation.

## Safety device 2:

The control unit allows Photocells to be powered and connected in accordance with directive EN 12453.

If the device trips during opening, the gate stops momentarily. Once freed, the control unit continues the opening phase. If the device trips during closing, gate motion is reversed.

The control unit compulsorily requires the use of photocells, connected to dedicated inputs, otherwise the unit is not enabled for operation.

## **Adjusting Power and Initial Surge:**

The electronic control unit is equipped with a "POWER" trimmer to adjust motor Power and Speed, fully managed by the microprocessor. The adjustment can be made within a range of 50% and 100% of the Maximum Power.

Nevertheless, every movement has an initial surge, powering the motor for 2 seconds at the maximum power even if motor power adjustment is enabled.

**Attention:** You will need to repeat the Motor Time programming procedure if you wish to adjust the "POWER", as operation and deceleration times may be affected.

### Obstacle detection:

The electronic control unit is equipped with a "SENSITIVITY" trimmer to adjust the Counter Power required to detect the obstacle, fully managed by the microprocessor.

The adjustment can be made by setting a time interval between a minimum of 0.1 seconds and a maximum of 3 seconds.

Note: by setting the "SENSITIVITY" trimmer at the minimum, the obstacle detection function is excluded.

## Warning:

- During the slowed motion phase the obstacle detection function is always disabled.
- The obstacle detection function always causes motion reversal during the closing phase (except in the last 5 seconds of operation, in which case it stops) and reversal for 2 seconds during the opening phase (except in the last 5 seconds of operations, in which case it stops).

### **Deceleration:**

The motor deceleration function is used on the gates to stop them from reaching their final position at a high speed in the opening and closing phases.

The control unit allows deceleration to be programmed for the desired points (before the gates are completely open or closed) during Motor Timer programming (see Main menu). It is also possible to select the motor power to which the deceleration phase between 6 different levels of power is carried out (see Extended menu 3). The intermediate level is set during factory configuration.

### Flashing beacon function:

The electronic control unit is equipped with an output for the management of the flashing beacon 230 Vac. Its function is conditioned by motor motion and automatic closing which if activated, enables the flashing beacon even during pause time.

## **Operation with TIMER:**

The control unit can have a timer set up instead of an openclose ( PUL ) control button.

Example: at 08:00 the timer closes the contact and the control unit opens the gate. At 18:00 the timer opens the contact and the control unit closes the gate. During the interval between 08:00 and 18:00, at the end of the opening phase, the control unit disables the flashing beacon, automatic closing and radio controls.

## **PROGRAMMING:**

**SEL key:** selects the type of function to be stored, selection is indicated by a flashing LED.

Repeatedly press the key to select the desired function. The selection remains active for 10 seconds, (indicated by the flashing LED); after 10 seconds, the control unit returns to its original status.

**The SET key:** this programs the information according to the type of function previously selected with the SEL button. *IMPORTANT:* The function of the SET key can be replaced with the radio control, if programmed previously (CODE led on).

# **MAIN MENU**

The control unit is provided by the manufacturer with the possibility of selecting a number of important functions.

MAIN MENU				
LED Reference	LED off	LED On		
1) AUT / P-P	Automatic	Step by Step		
2) CODE	No code	Code entered		
3) CODE PED.	No code	Code entered		
4) INB.CMD.AP	Disabled	Enabled		
5) T. MOT.	30 sec. motor time	Programmed time		
6) T.MOT.PED.	Mot. Time Ped. 10 s	sec. Programmed time		
7) T. PAUSA	No auto close	With auto close		
8) RIT. ANTE	No gate delay.	Programmed time		

## 1) AUTOMATIC / STEP BY STEP:

The default settings of the control unit have " Automatic " operating logic enabled (AUT/P-P LED off), if you want to enable the operating logic "Step by Step" (AUT/ P-P LED on), it is necessary to enable it; use the SEL key to move to the flashing AUT/P-P LED then press the SET key. AUT/P-P will light up steadily. Repeat the procedure to restore the previous configuration.

## 2) CODE: (Radio control code)

The control unit can store up to 150 radio controls with different fixed or rolling codes.

## Programming.

The transmission code is programmed in the following way: using the SEL key to move to the flashing CODE LED, at the same time send the pre-selected code from the radio control you wish to use; when the CODE LED stays on steadily, programming is finished. If all 150 available codes have been memorised, by repeating the programming operation, all programming LEDs will start to flash, indicating that it is not possible to memorise any more codes.

# Deletion.

All the stored codes are deleted as follows: press the SEL button until the CODE LED\*\* flashes, then press the SET button and the CODE LED turns off and the codes are deleted.

3) CODE PED:(Code for the radio control Ped. / Anta S.)

The programming and deleting procedure is the same as the one illustrated above except that the selected LED should be for PEDESTRIAN CODE.

4) INB. CMD. AP: (Command inhibition during opening and pause time, if entered)

The command inhibition function during opening and pause time, if entered, is used when automation includes a loop detector. During the opening or pause phase the control unit does not receive the commands sent by the loop detector with every passage.

The default settings of the control unit have disabled command inhibition during opening and pause time. If it is necessary to enable it, do the following: use the SEL key to move to the flashing INB.CMD.AP LED then press the SET key. The INB.CMD.AP LED will light up steadily. Repeat the procedure to restore the previous configuration.

# **5) T. MOT and DECELERATION:** (Programming a motor operation time of max 4 minutes)

The control unit is supplied by the manufacturer with a default motor operation time of 30 seconds, without deceleration.

If it is necessary to modify the operating time of the motors, programming must be carried out when the gate is closed, as follows: use the SEL key to move to the flashing T.MOT LED. then press the SET key briefly. Motor 1 will start the opening cycle; in correspondence with the point desired to start deceleration press the SET key again: the T. MOT. LED. will start flashing more slowly and Motor 1 will decelerate; when the desired position is reached, press the SET key to complete the opening cycle. The T. MOT LED will now start flashing normally again and Motor 2 will begin its opening cycle: repeat the operations to program the work time for Motor 2, After programming the opening times for the motors, Motor 2 will start its closing cycle: repeat the same instructions as above for programming the closing cycle of Motor 2 and then for Motor 1. If you do not want the control unit to decelerate, when the opening and closing phase is finished, press the SET key twice during programming, instead of just once.

During programming it is possible to use the radio control key located on the control unit, instead of the SET key, only if previously memorised.

**6) T. MOT. PED:** (Programming a pedestrian operating time of 4 minutes max.)

The control unit is factory supplied with a predefined (Pedestrian) Motor 1 operating time of 10 sec. without deceleration.

If it is necessary to modify the pedestrian operating time, programming must be carried out when the gate is closed, as follows: use the SEL key to move to the flashing T.MOT PED. LED, then press the SET key briefly. Motor 1 will start the opening cycle; in correspondence with the point desired to start deceleration, press the SET key again: the T. MOT. PED. LED will start flashing more slowly and Motor 1 will decelerate; when the desired position is reached, press the SET key to complete the opening cycle. At this point the T. MOT PED. LED will start flashing at its standard pace again and the Motor 1 will begin the closing phase; repeat the above operations for the closing phase. If you do not want the control unit to decelerate, when the opening and closing phase is finished, press the SET key twice during programming, instead of just once.

During programming it is possible to use the radio control key located on the control unit, instead of the SET key, only if previously memorised.

7) T. PAUSA: (Automatic closing time programming max. 4 minutes) The control unit is factory supplied without automatic closing. If you wish to enable automatic closing, proceed as follows: using the SEL key to move to the flashing T. PAUSA LED, press the SET key briefly, then wait for the amount of time you wish to set for automatic closing; briefly press the SET key again, and in that moment the automatic closing time will be stored and the

T. PAUSA LED will stay on steady. If you wish to restore the initial condition ( without automatic closing ), move to the flashing T. PAUSA LED, then press the SET key twice within 2 seconds; the LED will shut off and the operation will be complete.

During programming the radio control key of the control unit can be used instead of the SET key, if stored previously.

## 8) T. RIT. ANTE: (Programming door delay of 15 sec. Max.)

The control unit is supplied by the manufacturer without gate delay during opening and closing. If it is necessary to enter a gate delay time, programming must be carried out when the gate is closed, as follows: use the SEL key to move to the flashing RIT. ANTE LED, press the SET key, wait for desired interval of time, then press the SET key again: the gate delay time opening will be stored, at 2 seconds, of the delay time of the door closing for the time programmed and the RIT. ANTE LED is steady.

To restore the initial configuration (without door delay), go to the RIT. ANTE LED when flashing then press the SET key twice within 2 seconds, the LED goes off and the operation is completed.

# **EXTENDED MENU 1**

The control unit is supplied by the manufacturer with the possibility of selecting only the main menu functions.

To enable the functions listed in extended menu 1, proceed as follows: press the SET button and hold for 5 seconds, after which the T. PAUSA LED and RIT. ANTE LED will flash alternately. You have 30 seconds to select the functions of Extended Menu 1 using the SEL and SET buttons. After another 30 seconds, the control unit returns to the main menu.

EXTENDED MENU 1				
Reference LED	LED Off	LED On		
A) AUT / P-P	PGM remote = OFF	PGM remote = ON		
B) CODE	Test Photocell = ON	Test Photocell= OFF		
C) CODE PED.	Mant. Pressure = OFF	Mant. Pressure = ON		
D) INB.CMD.AP	Water Hammer = OFF	Water Hammer = ON		
E) T. MOT.	Closing Hammer = OFF	Closing Hammer = ON		
F) T.MOT.PED.	Safety Device 2 Blo	ock Input		
G) T. PAUSA	Alternate ON/C	OFF flashing light		
H) RIT. ANTE	Flashing beacon ON	OFF in alternation		

## A) AUT / P-P

### ( Remote programming of radio control ):

The control unit allows the transmission code to be programmed, without using the SEL button directly on the control unit, but remotely.

The remote transmission code can be programmed as follows: continuously sending a previously-memorised radio control code for more than 10 seconds. At this point the control unit switches to programming mode, as described above for the CODE LED in the main menu.

The control unit is supplied by the manufacturer with the remote transmission code programming function disabled. If you wish to enable the function, proceed as follows: check that Extended Menu 1 is enabled (RIT. ANTE LED and T. PAUSA LED start flashing alternately, with the SEL key positioned on the flashing of AUT/ P-P LED then press the SET key, the AUT/P-P LED will simultaneously stays on steadily and programming is completed. Repeat the procedure to restore the previous configuration.

## B) CODE (Test Photocell):

The control unit is supplied by the manufacturer with photocell Test programming enabled (in accordance with Standard EN 12453). If you wish to disable the function proceed as follows: check that Extended Menu 1 is enabled (T. PAUSA and RIT. ANTE LEDs flashing alternatively), with the SEL key position on the flashing of CODE LED then press the SET key, the CODE LED will simultaneously stay on steady and programming is completed. Accordingly, the photocell test will not be carried

out, therefore even if not connected (if unused, DS1 and DS2 inputs must be jumped), the control unit is enabled for operation. Repeat the procedure to restore the previous configuration.

# C) CODE PED (Hydraulic Motors Maintenance Pressure):

The control unit is supplied by the manufacturer with the hydraulic motors maintenance pressure function disabled. If you wish to enable the function, proceed as follows: make sure that you have enabled Extended Menu 1 (T. PAUSA LED and RIT. ANTE LED start flashing alternately), with the SEL key position on the flashing of CODE PED LED then press the SET key, the PED CODE LED will simultaneously stay on steady and programming is completed. Accordingly the control unit will send a closing command every 2 hours to the motor for 2 seconds. Repeat the procedure to restore the previous configuration.

## D) CODE PED. ( Water Hammer ):

The control unit is supplied by the manufacturer with Water Hammer disabled. If you wish to enable the Water Hammer function, proceed as follows: check that Extended Menu 1 is enabled (RIT. ANTE LED and T. PAUSA LED start flashing alternately), with the SEL key position on the flashing of INB.CMD.AP LED then press the SET key, the INB.CMD.AP LED will simultaneously switch on permanently and programming is completed. If you wish to enable the Water Hammer function to the power set through the "POWER" Trimmer, repeat the operation described above, pressing the SEL button twice instead of once (making the INB.CMD.AP. LED flash rapidly). Repeat the operation to restore the initial configuration.

Accordingly, we can facilitate the release of the gate and therefore allow the proper execution of the opening phase. In fact, the control unit, before starting the opening phase sends a closing command for 2 seconds with power relative to the choice selected.

# E) T. MOT. ( Closing Hammer ):

The control unit is supplied by the manufacturer with the Closing Hammer Function disabled. If you wish to enable the Closing Hammer function, proceed as follows: make sure that you have enabled Extended Menu 1 (RIT. ANTE LED and T. PAUSA LED start flashing alternately), with the SEL key position on the flashing of T.MOT. LED then press the SET key, the T.MOT. LED will simultaneously switch on permanently and programming is completed. If you wish to enable the Closing Hammer function to the power set through the "POWER" Trimmer, repeat the operation described above, pressing the SEL button twice instead of once (making the T.MOT. LED flash rapidly). Repeat the operation to restore the initial configuration.

Accordingly the control unit, if functioning with Deceleration during closing, will reach (after having completed the deceleration closing phase) a time of 1 second with power relative to the choice selected in order to overcome the gate installed.

## F) T. MOT. LED (Safety device 2 / Block):

The control unit is supplied by the manufacturer with the Block input function disabled. If you wish to enable the function, proceed as follows: make sure that you have enabled Extended Menu 1 (T. PAUSA LED and RIT. ANTE LED start flashing alternately), by using the SEL key select the flashing T. MOT. PED. LED and press the SET button: T. MOT. PED. LED stays steadily lit and programming is complete.

Accordingly the control unit, changes the function provided for Safety Device 2 input (CN2 no. 9-10) in safety block input with the following function: the intervention in any function phase of the control unit triggers the immediate stop of motion. A further motion command will be valid as long as the block input has been deactivated and, in any case, will carry out the automatism closing phase with a pre-flashing interval of 5 sec.

## **EXTENDED MENU 2**

The control unit is supplied by the manufacturer with the possibility of directly selecting the main menu functions only. To enable the functions listed in Extended Menu 2, proceed as follows: open Extended Menu 1 (as instructed in the respective section), then press and hold the SET key for 5 seconds, the T. PAUSA LED and RIT. ANTE LED will flash simultaneously, accordingly, you have 30 seconds to select the functions of Extended Menu 2 using the SEL and SET buttons. After another 30 seconds, the control unit returns to the main menu.

	EXTENDED ME	NU 2
Reference LED	LED Off	LED On
A) AUT / P-P	Follow Me = OFF	Follow Me = ON
B) CODE Pre	Flash. and Cort. L=OFF	PreFlash. or Cort. L. =ON
C) CODE PED.	Pause Lamp. = OFF	Pause Lamp. = ON
D) INB.CMD.AP	SOFT START = OFF	SOFT START = ON
E) T. MOT. EI	. Gate CMD PED = OFF	El. Gate CMD PED = ON
F) T.MOT.PED.	PUL=PUL - PED=PED	PUL=AP - PED=CH
G) T. PAUSA	Flashing beac	on ON/OFF simultaneous
H) RIT. ANTE	Flashing beacon ON	I/OFF in simultaneous

## A) AUT/P-P (Follow Me):

It is possible to set the "Follow Me" function on the control unit: this function can only be programmed if a Pause Time has already been programmed, and it is used to shorten the Pause time to 5 sec after the photocell disengages, i.e. the gate closes 5 seconds after the user has passed through. If you wish to enable the function, proceed as follows: make sure that you have enabled Extended Menu 2 (T. PAUSA LED and RIT. ANTE LED start flashing simultaneously), with the SEL key position on the flashing of AUT/ P-P LED then press the SET key, the AUT/P-P LED will simultaneously switch on steadily and programming is completed. Repeat the procedure to restore the previous configuration.

## B) CODE ( Pre-flashing / Courtesy Light ):

The control unit is supplied by the manufacturer with Preflashing and Courtesy Light functions disabled. If you wish to enable the Pre-flashing function, proceed as follows: make sure that you have enabled Extended Menu 2 (T. PAUSA LED and RIT. ANTE LED start flashing simultaneously), with the SEL key position on the flashing of CODE LED then press the SET key, the CODE LED will simultaneously switch on permanently and the programming is completed. If you wish to enable the Courtesy Light, repeat the operation described above, pressing the SEL button twice instead of once (the CODE LED will flash rapidly). Repeat the operation to restore the initial configuration.

**Pre-flashing\*\* function** The flashing beacon 230 Vac is always activated 3 seconds before the automation starts any type of motion.

**Courtesy Light Function:** The Flashing beacon 230 Vac output will be activated for 3 minutes, each time that an opening command is given.

## C) CODE PED ( Flashing beacon function ):

The control unit is supplied by the manufacturer with the flashing beacon function during the enabled Pause Time. If you wish to disable the function, proceed as follows: make sure that you have enabled Extended Menu 2 (T. PAUSA LED and RIT. ANTE LED start flashing simultaneously), with the SEL key position on the flashing of PED CODE LED then press the SET key, the PED CODE LED will simultaneously switch on permanently and programming is completed. Repeat the procedure to restore the previous configuration.

# D) INB. CMD. AP. LED (SOFT START):

The control unit is supplied by the manufacturer with the Soft Start function disabled. If you wish to enable the function, proceed as follows: make sure that you have enabled Extended Menu 2 (T. PAUSA LED and RIT. ANTE LED start flashing

simultaneously), with the SEL key position on the flashing of INB.CMD.AP LED then press the SET key, the INB.CMD.AP LED will simultaneously stay on steadily and programming is completed. Accordingly, every time the gate starts motion the control unit will control motor start-up, increasing the power gradually from minimum to maximum in the first two seconds of operation. Repeat the procedure to restore the previous configuration.

## E) T. MOT. (Electric Lock activation CMD PED.):

The control unit is supplied by the manufacturer with the activation of the electric lock through the disabled Pedestrian command. If you wish to enable the function, proceed as follows: make sure that you have enabled Extended Menu 2 (T. PAUSA LED and RIT. ANTE LED start flashing simultaneously), with the SEL key position on the flashing of T.MOT. LED then press the SET key, the T.MOT. LED will simultaneously switch stay on steady and programming is completed. The activation of the electric lock function through the Pedestrian command, is used when you have, for example, a sliding gate with a door next to the Pedestrian passage. Accordingly, the gate can be opened with the PUL commands as well as from the Pedestrian door using the electric lock with the PED. commands. Repeat the procedure if you wish to restore the previous configuration.

## F) T. MOT. PED (PUL and PED command functions):

The control unit is factory supplied with PUL control input operation for the connection of a cyclical primary control button (NA) and a PED input for the connection of a cyclical Pedestrian command button (NA). If you wish to select another mode of function of the PUL and PED inputs, proceed as follows: make sure that you have enabled Extended Menu 2 (T. PAUSA LED and RIT. ANTE LED start flashing simultaneously), by using the SEL key select the flashing T. MOT PED. LED and press the SET button: T. MOT. PED. LED remains steadily lit and programming is complete.

Accordingly, the PUL input makes it possible to connect a button (NA) for the Opening phase only, and the PED input for connection to a button (NA) for the Closing phase only. Repeat the procedure if you wish to restore the previous configuration.

# **EXTENDED MENU 3**

The control unit is supplied by the manufacturer with the possibility of directly selecting the main menu functions only. To enable power programming functions for deceleration carried out by the control unit, proceed as follows: open Extended Menu 2 (as instructed in the respective section), then press and hold the SET key for 5 seconds, after which the T. PAUSA LED and RIT. ANTE LED will start flashing alternately and then simultaneous, in this way there will be 30 seconds to select the desired deceleration using the SEL and SET keys, then, after a further 30 seconds, the control unit returns to the main menu.

	EXTENDED MENU 3
Lev	rel Leds On
1	AUT / P-P
2	AUT / P-P - CODE
3	AUT / P-P – CODE – CODE PED.
4	AUT / P-P - CODE - CODE PED INB. CMD. AP. LED
5	AUT / P-P - CODE - CODE PED INB. CMD. AP - T. MOT.
6	AUT / P-P - CODE -CODE PED INB. CMD. AP - T. MOT T.MOT.PED.

## **Programming Motor Power during Deceleration**

The control unit allows you to programme the motor power to which the deceleration phase will be carried out.

It is possible to choose between 6 different levels of power in this way: every combination of lit LEDs corresponds to a level according to the table above; in other words, starting from the lowest LED ( LED AUT/ P-P ) and moving upwards, each LED corresponds to a higher power level. Using the SEL key it is possible to scroll through the different power levels; for every

selected power level, the highest respective LED will flash (for example, if level 4 is selected the AUT/ P-P, CODE and CODE PED LEDs light up steady, whereas the INB CMD. AP LED flashes); press SET to confirm.

Level 3 is selected in the default configuration.

## **RESET:**

To reset the default configuration of the control unit, press the SEL and SET buttons simultaneously; all **RED** signal Leds will switch on and then immediately off again.

## **DIAGNOSTICS:**

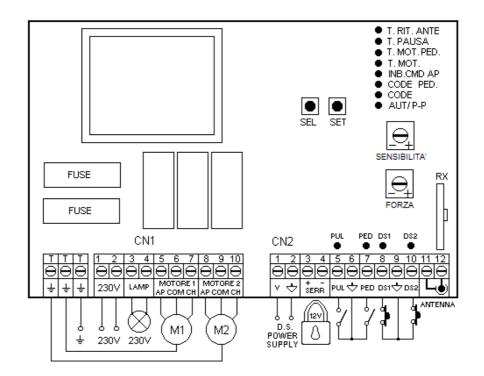
### **Photocell Test:**

The control unit is designed for the connection of safety devices that comply with point 5.1.1.6 of standard EN 12453. With every operation cycle, it performs a test of the operating photocells connected. If there is no connection and/or non operation, the control unit does not enable gate motion, and will visually report the failed test by simultaneously flashing all of the LED signal lights flash. Once the photocells are running correctly again, the control unit is ready for normal operation. This ensures monitoring against failures, in compliance with EN 954-1, Category 2.

### **Control input test:**

On each low voltage control input, the control unit uses a LED signal to make the status readily known.

Operating logic: when a LED is on it means the input is closed, when a LED is off it means the input is open.



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